



Ex Parte Filing

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: CC Docket No. 95-155 Toll Free Service Access Codes;
CC Docket No. 96-115 Telecommunications Carrier's Use Of Customer
Proprietary Network Information And Other Customer Information
CC Docket No. 17-192 Toll Free Assignment Modernization
CC Docket No. OEA 19-101 Auction of Toll Free Numbers in the 833 Code

Dear Ms. Dortch:

On August 8th, 2019 the undersigned of Ignition Toll Free met (via telephonic bridge) with Nirali Patel, Wireline Advisor to Chairman Pai.

The purpose of the teleconference was to provide additional information related to a teleconference that was held with Ms. Patel on April 5, 2019 (See [Ex Parte 4/5/19](#)).

We discussed that the following items during this teleconference:

Passages from the book, Location Aware Applications, written by Richard Ferraro and Murat Aktihanoglu:

Page 230 – 10.5.2 Opt-in Screens

Opt-in screens have their value, but another way to protect privacy in LBS applications is to use a “fuzzy” position instead of a precise one.

Page 231 - 10.5.3 Fuzzy location

A popular way to protect privacy is to share a fuzzy position instead of precise GPS coordinates.

Background

Telecommunications service providers (TSPs) have requested the FCC to provide guidance to the wireless carriers on the matter of Location based data for the purposes of call routing. The lack of coarse/fuzzy/imprecise location data is negatively impacting the value of toll-free numbers by limiting their utility and TSPs believe the wireless carriers should make it available for the limited purpose of routing calls.



There are two forms of location data: Precise/GPS location data and Coarse/Fuzzy/Imprecise location data (CFI).

The claims of privacy violations against the wireless carriers are all related to abuses of precise/GPS location data. TSPs do not need precise/GPS location data to route calls, only CFI location data.

When consumers think of location data they think of GPS data. GPS data is the kind used for navigation apps and it attempts to locate your physical handset. It's very invasive and reveals the most intimate details about a person's whereabouts. That's why when it is used it always requires an explicit opt-in.

Whereas, CFI data is generalized and reveals no specific information about a caller's location. In fact, the accuracy of this location data is totally customizable by the wireless carriers. A simple way to think about it is to think about how someone selects the temperature of their oven. Just like an oven's temperature is set, the wireless carriers can determine how granular the location data is that passes through their networks. They control how precise the data is *or* is not.

What's even more interesting is that if the wireless carriers had only provided CFI location data, the breaches that hit the headlines (Securus and Bail Bond Bounty Hunters) would never have occurred because the location data would have been too inaccurate to be useful to anyone other than TSPs who simply want to route calls correctly.

Responses to filings and complaints

Several comments and filings have appeared on the FCC's site from various organizations condemning the wireless carriers and asking the FCC to investigate and enforce against the carriers for Sections 201(b) and 222. Of note is the informal complaint filed by [New America's Open Technology Institute, Free Press, Center on Privacy and Technology at Georgetown Law](#). This complaint assumes all location data is the same from the carriers. **This is made clear by the complaint only referencing GPS location data.** This complaint is a clear example of why the FCC needs to provide guidance on this matter and clarify which location data should and should not pass through to TSPs.

The [Competitive Carriers Association](#) filed comments against the [Petition for Emergency Declaratory ruling filed by 800response](#). Their position is that "*the Commission should not adopt a policy that would effectively limit privacy protections that wireless providers may wish to establish for their customers.*" This argument is self-serving. The wireless carriers could have established policies at any time prior to this. Also, the location data at issue originates from the wireless carriers. They alone have the ability to make the data as granular as they want. The way they frame their argument is misleading because it takes an all or nothing approach. They frame their argument to appear as though they can only



provide location data that would violate their customers' privacy. But that is not true because the wireless carriers control the granularity of the location data and can make it general enough to route calls without being invasive or capable of being used for nefarious purposes.

There are also comments [filed by the CTIA](#) that state, "*wireless service providers take seriously the importance of protecting their customers' personal information, including location information.*" Unfortunately their actions have shown us otherwise as is evidenced by repeated failures to protect such data. A simple search of the wireless carriers combined with the word breach displays multiple breaches by all of the wireless carriers (Links [Sprint Breach](#), [Verizon Breach](#), [T-Mobile Breach](#), [AT&T Breach](#)). All of these breaches revealed data that is much more private and harmful to consumers than anything even remotely close to what CFI location data provides for call routing purposes. The wireless carriers want to control location data but at the same time do not want to be regulated. They use their customers' privacy as an excuse to accomplish this. But to allow them to remove all location data in the name of consumer privacy protection throws the baby out with the bath water and harms consumers by making our nation's telecommunications network unreliable and less useful.

What happens without CFI location data?

Without CFI location data TSPs are forced to ask callers to enter their zip code in order to route their calls. This is problematic on several levels. My customers have told me that they are seeing a 50% or more increase in dropped calls once a zip code is requested. Many demographics struggle with the exercise, such as the elderly, hearing impaired and those for whom English is not a first language. In addition, anyone operating a motor vehicle should not be asked to input anything on their phone while driving.

Then there are the practical limitations to zip code entry. Imagine if your car broke down between your work and home and you had to call roadside assistance. Because you are somewhere between your office and your home there is a good chance you would not know the zip code you were currently in. Without CFI location data the only way roadside assistance can get a general idea of your location is to have you enter your zip code. With CFI location data, roadside assistance can at least figure out which tow truck is near you and which mile markers to look between.

If we just let the wireless carriers do what they want with the data and our industry and the FCC do nothing, the result will be that when people place a call they will get routed incorrectly, hang up, and then go online to Google to try and find a different phone number or means of contact. This will just be placing more power into the tech giants' hands and render our nation's telecommunications network less useful and relevant.



CFI Location data is not invasive and has not been abused

The Network Advertising Initiative does a good job of describing CFI location data and provides visuals too -

https://www.networkadvertising.org/sites/default/files/NAI_ImpreciseLocation.pdf.

It should also be noted that **TSPs do not store location data**. Once a call is correctly routed and billed it is disposed of because it serves no purpose afterwards.

It should also be noted that there has **never been** a reported breach or privacy violation by a TSP using location data to route calls.

Lack of CFI location data presents real and dangerous consequences to the public

I have personally spoken to a National Suicide Prevention network regarding CFI location data. They informed me that they currently do not have access to CFI location data and if they did it would remove two entire steps from their call flow. They explained that if someone calls the hotline and an agent determines the situation has escalated to the point where local emergency assistance is needed, having CFI data would let them know the nearest emergency dispatch center to connect them to. **Having access to CFI location data would save time and lives.** The example they provided to me was if someone called while on the Golden Gate Bridge, they would at least know to contact the San Francisco emergency dispatch center.

They also noted that a consent based opt-in or message that informed callers their location would be used would deter many people from staying on the line, which is the last thing you want to happen when dealing with someone contemplating suicide.

Another organization lacking CFI data is National Poison Control. For their application, poison control centers are at the county level and CFI location data would allow them to connect callers to their counties' poison control center.

The Pennsylvania Highway Authority no longer has access to CFI data. This had been particularly useful to them a couple years back when extreme flooding left many motorists stranded and the data helped to dispatch emergency crews to the nearest caller.

There are many other applications that used CFI location data that are now struggling without it. The shared-use industry is severely impacted by this along with call centers, franchises and least cost routing providers.

Even U.S. Senators are impacted by this. Many include toll free numbers on their site for their constituents to call them. But if a caller has an out of state phone number they are now unable to reach their own representative because the routing system assumes the caller is an out of state caller based upon their mobile phone's area code.



Not all of these entities qualify for a public safety exception even though some of them help save lives. Others provide an incredible convenience to consumers. And unlike most of the technology today that requires consumers trade their privacy (GPS data) in exchange for “free access” to an app or website, CFI data requires no such a compromise for the convenience it offers.

Call Completion

The [Petition for Emergency Declaratory ruling filed by 800response](#) argues Section 222 of the Communications Act of 1934 does not permit carriers to block interconnection to their location platform for toll-free calls initiated on their networks or to impose an obligation to obtain consent of customers to use their location.

The lack of location data is impacting call completion very negatively. The wireless carriers’ notice requirements went from prompting callers with a message that stated “Please hold while your phone’s location is used to route your call,” to a prompt that required consent via keypad input. Their new prompt required the following be said: “Your phone’s location can be used to route your call, press 1 now to use your phone’s location to route your call.” After this new prompt was implemented one of the wireless carriers documented its impact on call completion. They found that **60% of callers hung up when presented with the message and requirement that they press 1.**

It is no surprise that 60% of callers hung up. Many callers have never heard such a request and people are justifiably concerned about their privacy data as noted by the comments filed by the [Internet Innovation Alliance](#). And to explain to callers the difference between GPS and CFI data so they can consent would be unnecessarily burdensome and would contribute further to reducing call completion.

Requiring notice and consent to route calls using CFI location data would be an alarmist requirement that does more harm than good. As noted above, CFI does not use a caller’s precise location or location data granular enough that could be used to locate the caller. Asking callers to consent to CFI location data would be akin to asking people to consent to ingesting probiotic bacteria. If asked, an overwhelming majority of people would decline simply because of the word bacteria, even though this form does not harm them and actually provides a benefit. Certain words presented to the general public only trigger fear and elicit a blanket response when presented in the form of a question asking for consent.

If the FCC does not require the carriers to provide service providers with CFI location data to route calls, millions of calls every year will be misrouted and will result in irreparable harm to toll free and our nation’s telecommunications network.



833 Auction

Failure to resolve this issue will negatively impact the success of the 833 auction. Attached to this document are letters from several businesses that are not going to participate in the auction because of this. Their view is that toll free numbers without CFI location data are not worth bidding on. These views are not unique.

What the FCC can do

We urge the FCC and Chairman Pai take action on our request and rule in favor of the [Petition for Emergency Declaratory ruling filed by 800response](#) or in some other way **require the carriers to provide CFI location data for the limited purpose of call routing.**

Without CFI location data, toll free will eventually be rendered obsolete due to lack of utility and because no further innovation will occur around it. Toll Free numbers are non-geographic so the ability to route geographically is the one major advantages they offer over other forms of communication.

TSPs are in full agreement that explicit notice and consent should be obtained in instances where precise/GPS data is requested for call routing. But if only CFI location data is used then no such requirement should exist because a caller's location is not revealed, the data is not stored, and callers want their calls routed to the correct location.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruno Tabbi, Jr.", is written over a light blue horizontal line.

Bruno Tabbi, Jr.

cc (via email):
Nirali Patel

Encl: 833 Auction – Refusal to Participate Letters




July 30, 2019

Re: 833 Auction Participation

To Whom it May Concern,

Due to the removal of coarse/imprecise location data related to the geographical routing of toll free numbers, I will not be participating in the upcoming auction of 833 phone numbers.

Sincerely,



Darryl Ferdinand
Best Phone Numbers LLC
224-200-0000

Best Phone
Numbers™



July 30, 2019

To Whom It May Concern,

My company Tele-Name Communications, Inc, which was founded in 1992, intended to participate in the 833 "held-back number" auction.

As of now Tele-Name will decline to participate in the auction. The reason we are no longer interested is simple - with the loss of location data of the caller to the toll-free number, we can longer perform the Lead Generation services (routing) for our marketing programs. The loss of even simple, general location such as the state the person is in, eliminates our interest in any new 833 numbers.

If the situation changes and carriers are able to provide, state or even better, county location of the caller we would re-evaluate the situation and most likely would participate in the auction for at least a few of the held-back numbers.

Sincerely,

David Ashley
President
Tele-Name Communications Inc.



July 30, 2019

Re: 833 Auction Participation

To Whom It May Concern,

Due to the removal of coarse/imprecise location data related to the geographic routing of toll free numbers, we will not be participating in the upcoming auction of 833 phone numbers.

Sincerely,
Brian Lynott

O: 1-800-PORTING
D: 503-539-3303
US: 2700 NE 4th St, STE 240 Bend, OR 97701
BC: 1285 West Broadway, Vancouver, BC V6H 3X8
W: www.atlc.com E: blynott@atlc.com

Vanity International
PO Box 2004
Del Mar, CA 92014
800-438-8264 858-792-8888 Fax

Re: 833 Auction Participation

To Whom It May Concern:

Here's what I know from speaking with many of the geo-program owners; We can't even get 800 numbers to route, so why do we need 833 numbers!!!

Our industry is being badly degraded but this denial of location service. Yes, let's call it what it is; DENIAL OF SERVICE.

This is not rocket science. We just need to correctly route calls in real-time. As operators, we do NOT see ANY location data from the routing company. We simply benefit from having calls routed properly. Now that a double-digit percentage of callers have out-of-area NXX numbers what we have today is WORSE than we had in the 1990's, when most NXX number we're pegged to locations.

Even the Supreme Court ruled (Carpenter, 2018) that it takes 7 days of cell tower data -- 7 days -- to become an invasion of privacy. That's, on average, 140 x 7 or 980 cell tower data points. The minority opinion was that there was NO invasion of privacy, regardless of number of data points, because of the 3rd party doctrine.

This is just cell tower data, not precise data off the phone itself. We just need ONE data point to route a call in real time. This CANNOT be degraded in any way.... We should be able to call and text 1-800-STARBUCKS and get to the nearest shops, not to one within a few miles-- there may be dozens!!!!

https://en.wikipedia.org/wiki/Carpenter_v._United_States

The real solution is to mandate WHO has access to this data, not to shut down the phone system routing data. We're competing with the Internet. Our clients can watch as their Uber drivers approach in real time. What audacity to suggest that we can't even routes calls into the right state!!

This is just nuts. The Supreme Court has ruled and it takes 100x more data than we need to justify a warrant vs. and simple subpoena. This is now the law of the land.
What reality are these wireless carriers living in!??

Here are some of programs negatively affected by this removal of LBS data:

1-800-INJURED, 1-800-EXPERTS, 1-800-NOT-GUILTY, 1-800-NO-CUFFS, 1-800-THE-BULL, 1-800-LOS-TOROS, 1-800-SKIN-DOC, 1-800-FLAWLESS, 1-800-LASIK-DOC, 1-800-BACK-DOC, 1-

800-PET-DOCS, 1-800-VET-CARE, 1-800-EMPLOYED, 1-800-LAWYWERS, 1-800-ATTORNEY, 1-800-HURT-LAW, 1-800-NO-AGENT, 1-800-LEASE-IT, 1-800-BMW-CARS, 1-800-GO-LEXUS, 1-800-AUTO-CARE, 1-800-800-CARS, 1-800-800-AUTO, 1-800-CERTIFIED, 1-800-FOR-SALE, 1-800-JEWELRY... The list goes on.

Each local affiliate is experiencing trouble, NOW!!! These established, world-class programs don't even work-- some of them with a 20+ year history-- so where's the motive to buy more numbers?

We need location routing fixed at once, before we're all out of business. NOT some degraded rounding of location data. We need REAL cell tower data, as precise as it gets without extracting any data off the user's phone. Only precise look ups require opt-in permissions.

For routing, we need perfection!

Be Amazing!

Loren

1-800-Get-Vanity
800-438-8264